

Appl. No 10/734,539

Amdt. Dated 06/06/2006

Reply to Office action of 02/27/2006

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

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Listing of Claims:

1. (Currently amended) An in-mold foaming method for making soles, the method comprising the steps of:

15 1) inputting foaming material (~~rubber~~) in mold, wherein a volume percentage of foaming material in cavity of the mold is pre-calculated based on specific gravity;

2) foaming the rubber material in the mold for 4-8 minutes at centigrade 140-150 deg, under pressure 130-150 kg/cm², so as to form the sole directly in the mold cavity;

20 3) opening the mold and remove the sole so as to cool the foamed sole;

4) completing a semi-finished product of sole.

2. (Currently amended) The in-mold foaming method for making

soles as claimed in claim 1, wherein ~~before the step 1) inputting foaming material (rubber) in mold, can be added with~~ a process for making special portions is added before the step 1) inputting foaming material (rubber) in mold, which including includes the procedures as follows:

5 1) compressing portions “a” and “b” with middle plate: middle plate of the mold initially used to compress the special portions where is preinstalled with raw material into the cavity of the mold;

 2) cleaning off the scraps of the raw material after compression: cleaning scraps of raw material off the mold after the special portions are
10 compressed;

 3) inputting foaming material in mold;

 4) in-mold foaming step: forming the rubber material in a vacuum platform for 5 minutes at centigrade 150 deg under pressure 130-150 kg/cm², such that semi-finished product of sole is formed directly in the cavity of the
15 mold, and the semi-finished product of sole is integrally formed with the special portions;

 5) cooling the sole;

 6) getting semi-finished products: completing the semi-finished product of sole.

20 3. (Currently amended) The in-mold foaming method for making soles as claimed in claim 1, wherein high sidewall ~~can be~~ is synchronously formed on periphery of the sole during the in-mold foaming step.

 4. (Currently amended) The in-mold foaming method for making

soles as claimed in claim 1, wherein periphery structural pattern ~~can be~~ is synchronously formed on periphery of the sole during the in-mold foaming step.